

months pre- and post-index periods. Patients with diabetic peripheral neuropathic pain (DPNP) or depression in the 12 months pre-index period were excluded. Each patient was classified in the duloxetine or pregabalin cohort based on the initial agent. Pregabalin cohort was constructed via propensity scoring controlling for differences in demographics, pre-index clinical and economic characteristics, and pre-index treatment patterns. Medication compliance (i.e. medication possession ratio (MPR) and proportion of patients with MPR \geq 80%) and health care costs over the 12 months post-index period were examined between cohorts. **RESULTS:** Both the duloxetine (n = 3711) and pregabalin (n = 4111) cohorts had the mean age around 50 years. Many duloxetine and pregabalin patients had neuropathic pain other than DPNP (69.1% vs. 69.1%), low back pain (61.9% vs. 62.1%), cardiovascular disease (55.1% vs. 55.1%), hypertension (44.9% vs. 45.0%), and headache (36.0% vs. 35.3%), and used opioids (75% vs. 86%). Controlling for demographics, pre-index clinical and economic characteristics, and prior medication history, duloxetine patients had significantly higher MPR (0.66 vs. 0.50, $p < 0.05$), higher proportion of patients with MPR \geq 80% (47% vs. 26%, $p < 0.05$), and significantly lower total health care costs (\$19,378 vs. \$27,045, $p < 0.05$) over the 12 months follow-up period than pregabalin patients. **CONCLUSIONS:** Fibromyalgia patients treated with duloxetine had significantly higher medication compliance, but significantly lower direct health care costs than those on pregabalin.

PMS68

GRAND: THE GERMAN RETROSPECTIVE COHORT ANALYSIS ON NON-ADHERENCE IN OSTEOPOROSIS PATIENTS TREATED WITH ORAL BISPHOSPHONATES

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OBJECTIVES: To describe the adherence for different treatment regimens of oral bisphosphonates (oBP) in osteoporosis patients in Germany. **METHODS:** Analyses used IMS® Disease Analyser database (contains representative information on approximately 11 million patients from office-based physicians). Osteoporosis patients with a history of malignant diseases, any anticancer or cytostatic hormone prescriptions, Paget's disease or AIDS were excluded. Eligible osteoporosis patients had data available at least 1-year before and after starting oBP treatment between Dec 2004 and Nov 2007. Compliance was measured as Medical Possession Ratio (MPR); defined as the ratio of prescribed to assumed number of therapy units. MPR $> 80\%$ assumed compliance. MPR was calculated for patients on therapy for a maximum of 2 years. **RESULTS:** Data from 4,738 patients were analyzed: 4147 (87.5%) women, 4130 (87.2%) older than 60 years. A total of 177 (3.7%) received daily, 4367 (92.2%) weekly and 194 (4.1%) monthly oBP treatment. The mean MPR was 0.66 (daily), 0.83 (weekly) and 0.84 (monthly) in the oBP treatment period. In total, only 51% of patients had an MPR $> 80\%$. Overall, 72% patients discontinued/switched oBP regimen during the first year: 90.4% (daily), 71.6% (weekly) and 70.6% (monthly). **CONCLUSIONS:** The majority of patients were receiving weekly oBP therapy. Compliance varied for the different treatment regimens, but was particularly poor in patients receiving daily oBP treatment. In addition, a high proportion of patients discontinued/switched oBP regimens during the first year. This study provides further evidence of poor adherence in patients with osteoporosis receiving oBP therapy.

PMS69

ITEM REDUCTION AND VALIDATION OF A NEW ADHERENCE QUESTIONNAIRE IN OSTEOPOROTIC POST-MENOPAUSAL WOMEN: THE ADHERENCE EVALUATION OF OSTEOPOROSIS TREATMENT (ADEOS) QUESTIONNAIRE

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OBJECTIVES: To reduce and validate the ADEOS questionnaire, an instrument specifically developed to evaluate treatment adherence by women with post-menopausal osteoporosis. **METHODS:** The ADEOS questionnaire has been developed with clinicians and patients. Before item reduction, it included 45 items covering 5 distinct themes related to adherence (personal characteristics, beliefs, perceptions, behaviour and information received). It was included for finalisation and validation in a cross-sectional observational study in French general practitioners. The study sample was randomly divided into 2 subsamples: one for item selection, one for validation. The item selection procedure was performed according to the association of the items with a generic measure of compliance, the Morisky Medication Adherence Scale (MMAS). The validity of the score derived from these items was scrutinised by assessing its correlation with MMAS score. Its ability to separate compliant patients from non compliant patients according to MMAS was studied using area under receiver-operating characteristic curve (AUC). **RESULTS:** Five hundred sixty osteoporotic women were included, of whom 348 (62%) returned the ADEOS questionnaire. Patients who did not return the questionnaire were comparable to those who did in terms of demographics and medical parameters. The questionnaire quality of completion was very good, confirming its good acceptability. Twelve items of the questionnaire showed a statistically significant relationship ($p < 0.05$) with the MMAS in the "item selection sample" (N = 200) and were retained to derive the ADEOS score. In the "validation sample" (N = 148), the ADEOS score was noticeably correlated with MMAS score

(Spearman correlation coefficient: 0.58) and showed good discriminant validity according to MMAS (AUC: 0.84). **CONCLUSIONS:** The 12-item ADEOS questionnaire is a short validated instrument specific to osteoporosis, whose score can easily be calculated by hand. Therefore, it might be particularly useful in daily practice to detect patients at risk of being poorly adherent to their osteoporosis treatment.

PMS70

USE OF QUALITATIVE RESEARCH TO ELICIT PATIENT-REPORTED OUTCOME APPROACHES IN OSTEOPOROSIS

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OBJECTIVES: Recent anti-osteoporotic treatments are characterised by monthly or even yearly administration. These treatments may challenge the prescription of daily-administered drugs. The objective of this qualitative research was to explore patients' perception as well as clinicians' views on the frequency of anti-osteoporotic treatment administration. **METHODS:** A health psychologist carried out face-to-face interviews with six patients treated on a daily basis and six patients treated with a monthly-administered drug. The patients' perception, behaviour and expectations regarding anti-osteoporotic treatment were assessed. Clinicians who recruited the patients, comprising a general practitioner and specialists, were also interviewed. Information on factors driving their treatment choice decision and on the importance of patients' feedback and perception in their decision was collected. **RESULTS:** Patients perceived osteoporosis as a sign of premature ageing and a disease of secondary importance. They reported that a daily administration was not a problem *per se* if it did not modify their lifestyle. They raised concerns about lower frequency of drug administration that clinicians did not: the difficulty of remembering to take the treatment; the worry about the treatment being too concentrated, with the thought of a possible irregular efficacy of the drug over the time and a harmful effect. They did not feel involved in the choice of treatment. Clinicians believed monthly administration to be more convenient than daily administration. They declared choosing the treatment according to the patient's characteristics, in particular concomitant diseases, lifestyle, and dosing preference. **CONCLUSIONS:** Discrepancies exist between clinicians' perception and reality for patients regarding anti-osteoporotic treatment. Consequently, possible patient-reported outcomes approaches to improve treatment-decision would consist in 1) educating patients on osteoporosis, and clinicians on their patients' perception and expectations, and 2) promoting shared decision-making. This is likely to contribute to a better persistence of the patients with regard to their treatment.

PMS71

PREDICTING CHANGES IN EQ-5D UTILITY SCORE VIA PASI OR HAQ IN PSORIATIC ARTHRITIS PATIENTS

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OBJECTIVES: To compare the predictive power *post hoc* of skin signs and physical function in improvement of health state utility scores in a population with active psoriatic arthritis (PsA). **METHODS:** A 12-week randomized double-blind study followed by a 12-week open-label extension; subjects received etanercept 50 mg BIW or 50 mg QW during the double-blind period followed by 50 mg QW during the open-label period. Eligibility criteria included: age > 18 y; stable, moderate-to-severe plaque psoriasis with ≥ 2 swollen/painful joints. PASI for psoriasis signs, HAQ for physical function, and EQ-5D were measured at baseline, Weeks 12 and 24. Logistic regression was used to predict the minimally clinically meaningful change in EQ-5D of at least 0.05 (0–1.0 scale). Meaningful changes from baseline as predictors: HAQ = 0.375, 0.5; PASI = 50%, 75%. **RESULTS:** At baseline, subjects (n = 752) had a mean age 47 y, were 63% male, and 89% white. Mean number of tender joints =19.2, and swollen joints =12.5. Mean durations of psoriasis and psoriatic arthritis =19 and 7 years, respectively. Baseline scores were not significantly different between the 2 groups; pooled baseline (mean \pm s.d.) PASI = 19.43 \pm 10.28, HAQ = 0.91 \pm 0.69, and EQ-5D = 0.48 \pm 0.32. Only PASI change from baseline at Week 12 differentiated treatment groups. Pooled reductions from baseline to Week 24 (LOCF) were: PASI = 75.9%, HAQ = 52.0%. Proportion achieving EQ-5D (≥ 0.05) = 74.6%. HAQ changes from baseline were stronger predictors of pre-determined changes in EQ-5D utility scores than PASI changes, with HAQ change ≥ 0.375 at Week 24 being the strongest single change predictor (OR = 4.36 (2.01–9.44)). Higher baseline HAQ scores reduced the odds 0.12 (0.07–0.20), and 0.19 (0.11–0.31) for minimally meaningful health status improvements at Weeks 12 and 24, respectively. **CONCLUSIONS:** Patients with less advanced PsA could have better odds of meaningful improvement in health status when treated to reduce both skin and joint morbidity.

PMS72

A CALIBRATION OF THE RELATIONSHIP BETWEEN THE HAQ, THE SF-6D AND THE EQ-5D IN INFLAMMATORY ARTHRITIS

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OBJECTIVES: To examine the relationship between disease specific-measure, Health Assessment Questionnaire (HAQ) disability index (DI) and the preference-based measures, Short Form-6D (SF-6D) and the EuroQoL (EQ-5D) in patients with rheumatoid arthritis (RA) and psoriatic arthritis (PsA). **METHODS:** Five hundred and four patients attending a rheumatology outpatient clinic with RA and PsA completed the HAQ, Short Form-36 and the EQ-5D before starting biologic therapy and 12 months after.